



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,870	03/04/2005	Thomas Andreas Maria Kevenaar	NL 020804	5450
24737 7590 02/19/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER HO, BAO QUAN T	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 02/19/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/526,870

Applicant(s)

KEVENAAR ET AL.

Examiner

Bao-Quan T. Ho

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.
3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a

nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 5 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim recites a "computer program product" which is interpreted as being software per se. The functionality of functional descriptive material is realized only when the functional descriptive material is claimed as being embodied on ***a computer readable medium*** and is claimed as executed by a computer component. The cited claim provides no tangible computer components that work in conjunction with the functional descriptive material to impart functionality and as a result the claim is not statutory because it fails the practical application requirement of § 101 by failing to provide a useful, concrete, and tangible result (see MPEP 2106).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipate by Sakamoto, JP Publication JP 05323267 A.

As to claim 6, Sakamoto discloses in Fig. 1 a device for reconstructing a graphical message based on a key sequence, comprising

receiving means (random signal generation circuit 16 connected to LCD 12, Page 7, second half of paragraph [0022])) for receiving an encoded sequence of information units,

a first liquid crystal display (LCD 12) arranged for displaying the sequence of information units by rotating the polarization of respective cells in a first liquid crystal layer (23) by an amount indicated by respective elements in the encoded sequence (shown in Fig. 5, LCD 12 is induced with voltage by circuit 16 changing the liquid crystal element 23),

a second liquid crystal display (LCD 15), different from the first liquid crystal display (12), arranged for rotating the polarization of respective cells in a second liquid crystal layer (26) by an amount indicated by respective elements in the key sequence (shown in Fig. 5, LCD 15 is induced with voltage by circuit 16 changing the liquid crystal element 26), in which the first (12) and second liquid crystal display (15) are arranged to be superimposed on each other (shown in Fig. 1).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto in view of Sato et al. (hereafter referenced as Sato), US Patent 5,712,652.

As to claim 7, Sakamoto discloses the device in claim 6, but does not specifically disclose in which the first liquid crystal display comprises a reflective liquid crystal display.

However Sato discloses a first liquid crystal display comprising a reflective liquid crystal display (col. 10 lines 64-67 to col. 11 lines 1-14),

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to have used a reflective liquid crystal display as taught by Sato in place of the first liquid crystal display of Sakamoto for the purpose of lower power consumption (col. 11 lines 10-14).

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto in view of Dunn et al. (hereafter referenced as Dunn), US Patent 6,529,209.

As to claim 8, Sakamoto discloses the device in claim 6, Sakamoto also discloses in Fig. 1 wherein the second liquid crystal display (15) is embodied in a unit (glasses, Page 12 in paragraph [0039]) physically separable (wireless) from the first liquid crystal display (12), but does not specifically disclose wherein the second liquid crystal display is provided with a memory for storing the key sequence.

However, Dunn discloses in Fig. 3, a second liquid crystal display (active glasses with electro-optical elements, col. 6 lines 24-26) is provided with a memory for storing the key sequence (serial number used to decode the seed pattern, col. 9 lines 29-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to have added a memory for storing key sequence as taught by Dunn in to the unit of Sakamoto for the purpose of addition security (col. 9 lines 21-33).

12. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto in view of Blom, Canada Patent 2,214,190.

As to claim 9, Sakamoto discloses the device of claim 6, but does not specifically discloses the device comprising means for receiving input representing a set of coordinates from a user, and means for transmitting the received input to a server.

However, Blom discloses (whole page of Page 5) a device (touch sensitive display) comprising means for (microchip controller) receiving input representing a set of coordinates (touch positions of each security code) from a user, and means for transmitting the received input to a server (system computer).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to have implemented a touch sensitive display and send the input to a server as taught by Bloom to the device of Sakamoto for the purpose of enhanced security (Page 3, section 3.1).

As to claim 10, Blom discloses (whole page of Page 5) in which the input is received as pressure (touch sensitive display) on a particular spot (touch position) of the first liquid crystal display, the set of coordinates (touch positions of each security code) corresponding to the particular spot.

Allowable Subject Matter

13. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or suggest a method of encoding a graphical message using a liquid crystal display base on a key sequence by determining a total rotation value α , choosing an element α_2 for a key sequence, and from these two values computing a value α_1 that is the difference between α and α_2 for determining the encoded sequence in combination into other features and elements of claim 1.

14. **Claims 1-4 are allowed.**

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Figure M et al., JP 09083512 A, discloses visual cryptography using liquid crystals.
- b. Struyk, US Patent 6,980,177, discloses an image altering apparatus to provide confidential viewing on a video display.
- c. Struyk, US Patent 7,319,755, discloses an image altering apparatus to provide confidential viewing on a video display.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao-Quan T. Ho whose telephone number is (571) 270-3264. The examiner can normally be reached on M-F, 7:30 am to 5:00 pm EST, alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BTH


CHANH D. NGUYEN
SUPERVISORY PATENT EXAMINER